Attorney Docket No.: B0410/7284 U.S. App. No. 10/048,205

Filed: May 2, 2002

Amendment and Reply

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The following <u>Listing of the Claims</u> will replace all prior versions and all prior listings of the claims in the present application:

Listing of The Claims:

- 1. (Currently amended) A tissue implant device configured to resist migration in tissue comprising a <u>ribbon-like</u> filament <u>configured in a flexible helical coil having a plurality of turns, the filament having a rectangular cross sectional profile flat shape and an <u>integral outer</u> edge along its length, the edge being shaped to define along which is formed a plurality of <u>outwardly projecting</u> barbs that project from the edge and are adapted to engage surrounding tissue <u>in which the implant is embedded</u>, the filament being configured in a flexible helical coil having a plurality of turns.</u>
- 2. (Previously presented) An implant as defined in claim 1 wherein the barbs are proximally facing.
 - 3. (Cancelled)
- 4. (Currently amended) A tissue implant device configured to resist migration in tissue comprising a flexible helical coil having a corresponding helical an outer, helical edge and shaped to define a plurality of integral outwardly extending barbs projecting from the edge, each barb having a rounded contour adapted to engage surrounding tissue.
- 5. (Previously presented) An implant as defined in claim 1 wherein each barb has a sharp point configured for engaging tissue.
 - 6. (Cancelled)
- 7. (Currently Amended) An implant device as defined in claim 1 wherein each turn of the coil has a proximally facing edge and a plurality of barbs projecting from the edge of each turn.

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8. (Currently amended) A tissue implant device configured to resist migration in tissue comprising a flexible helical coil having a corresponding helical edge and an outer, integral edge shaped to define a plurality of outwardly extending barbs adapted to engage surrounding tissue projecting from the edge of each coil, wherein the coil is formed from a, the coil being in the form of a flat filament and comprising a plurality of materials each having a different modulus of elasticity.

- 9. (Currently amended) An implant as defined in claim 8 wherein the coil spring is formed from metal.
- 10. (Previously presented) An implant as defined in claim 9 wherein the metal is stainless steel.
- 11. (Currently amended) An implant as defined in claim 8 wherein the moduli modulus of elasticity of the coil varies along its length.

12.-13. (Cancelled)

14. (Currently amended) A method of forming a tissue implant device comprising: forming a ribbon from a sheet of material by a photochemical etching process, the ribbon having an edge along its length and a plurality of integral barbs projecting from defining the edge, in a sheet of material by a photochemical etching process;

separating the ribbon formed from the sheet of material; and wrapping the ribbon so formed form into a helical coil shape, plastically deforming the ribbon so that it retains the coil shape with the barbs projecting from the edge outwardly of the coil.

- 15. (Cancelled)
- 16. (Previously presented) A method as defined in claim 14 wherein the barbs are is formed along an edge that will be proximally facing after the ribbon is wrapped into a coil shape.
 - (Cancelled) 17.

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18. (Previously presented) A method of forming a tissue implant device as defined in claim 14 further comprising forming a plurality of ribbons in a single sheet of material by photochemical etching process.

19. (Withdrawn): A method of implanting a tissue implant device comprising: providing a flexible helical spring having at least one coil with at least one projecting barb that engages surrounding tissue;

providing a delivery device having a penetrating distal tip and being configured to hold the tissue implant for delivery into tissue;

advancing the delivery device and loaded tissue implant into biological tissue so that the tissue is penetrated and the implant is inserted into the tissue;

releasing the tissue implant into the tissue; withdrawing the implant delivery device.

- 20. (Withdrawn) A method of delivering a tissue implant device as defined in claim 19 wherein the tissue is accessed surgically.
- 21. (Withdrawn) A method of delivering a tissue implant device as defined in claim 19 wherein the biological tissue is accessed percutaneously.
- 22. (Previously presented) A tissue implant device as defined in claim 9 wherein the coil is formed from a nickel titanium alloy.
- 23. (Previously presented) A tissue implant device as defined in claim 2 wherein the barbs project proximally away from the edge of the coil.
- 24. (Previously presented) A tissue implant device as defined in claim 3 wherein the barbs project radially outward from the edge of the coil at an angle inclined in the proximal direction.

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25. (Previously presented) A tissue implant device as defined in claim 3 wherein the barbs curve radially outward from the edge of the coil at an angle inclined in the proximal direction.